

Data Files

File name	Description
datalabel.csv	CSV file that contains the data and labels. -1 denotes that a data point is missing.
data.csv	CSV file that contains the data. -1 denotes that a data point is missing.

Common Files

File name	Description
simple_regression.m	Performs linear OLS regression.
get_std_error.m	Calculates linear OLS robust standard error.
generate_titles.m	Sets case_title/case_summary to an appropriate value to display.
generate_xlabels.m	Retrieves the labels for the regressors and sets these to a variable called xlabels.
parse_raw_data.m	Parses raw data into the variables.
populate_data.m	A hub file that specifies the variables and invokes the correct populate_data method depending on the case number.
run_analysis.m	Computes and displays regression coefficient, bounds, and confidence intervals.
setBoundsd.m	Computes the bounds and confidence regions.

Linear Return to Education under Restrictions on Confounding (Case 1-6 and 19-21)

File name	Description
analyze_1.m	Main runnable file.
impute_parental_edu.m	This imputes missing mother or father education.
populate_case14.m	This is invoked for case 1. OLS (Given S1)
populate_case23.m	This is invoked for case 2. Proxy log of IQ (Given S1): excludes missing IQ observations
populate_case23.m	This is invoked for case 3. Proxy log of KWW (Given S1): excludes missing KWW observations
populate_case14.m	This is invoked for case 4. OLS (given GS): imputes parental education
populate_case56.m	This is invoked for case 5. Proxy log of IQ (Given GS): excludes missing IQ observations; imputes parental education
populate_case56.m	This is invoked for case 6. Proxy log of KWW (Given GS): excludes missing KWW observations; imputes parental education This generates the results in Table 1, columns 1, 3, and 4
populate_case19.m	This is invoked for case 19. Perfect Proxy. OLS (Given S1): condition on log(KWW); excludes missing KWW observations
populate_case20.m	This is invoked for case 20. Perfect Proxy. OLS (Given GS): condition on log(KWW); excludes missing KWW observations; imputes parental education This generates the results in Table 1, column 2
populate_case21.m	This is invoked for case 21. Used to get classic measurement error bounds. OLS (Given GS) of log(KWW) on GX and log(wage); excludes missing KWW observations; imputes parental education

Interaction of Education and Black under Restrictions on Confounding (Case 7-12 and 22-23)

File name	Description
analyze_2.m	Main runnable file.
impute_parental_edu.m	This imputes missing mother or father education.
populate_case710.m	This is invoked for case 7. OLS (Given S1): adds interaction term (Educ-12)*Black
populate_case89.m	This is invoked for case 8. Proxy log of IQ (Given S1): adds interaction term (Educ-12)*Black; excludes missing IQ observations
populate_case89.m	This is invoked for case 9. Proxy log of KWW (Given S1): adds interaction term (Educ-12)*Black; excludes missing KWW observations
populate_case710.m	This is invoked for case 10. OLS (Given GS): adds interaction term (Educ-12)*Black; imputes parental education
populate_case1112.m	This is invoked for case 11. Proxy log of IQ (Given GS): adds interaction term (Educ-12)*Black; excludes missing IQ observations; imputes parental education
populate_case1112.m	This is invoked for case 12. Proxy log of KWW (Given GS): adds interaction term (Educ-12)*Black; excludes missing KWW observations; imputes parental education This generates the results in Table 2, columns 1, 3, and 4
populate_case2223.m	This is invoked for case 22. Perfect Proxy. OLS (Given S1): condition on log(KWW); excludes missing KWW observations
populate_case2223.m	This is invoked for case 23. Perfect Proxy. OLS (Given GS): condition on log(KWW); excludes missing KWW observations; imputes parental education This generates the results in Table 2, column 2

Nonlinear Return to Education under Restrictions on Confounding (Case 13-18 and 24-25)

File name	Description
analyze_3.m	Main runnable file.
impute_parental_edu1618.m	This imputes missing mother or father education for cases 16 and 18 (where education indicators go from 2,...18).
impute_parental_edu17.m	This imputes missing mother or father education for case 17 (where education indicators go from 9 to 18).
populate_educ_indicators.m	This populates education indicators.
draw_graphs.m	Draws graphs. Figure 7 generates Graph 1 in the paper
populate_case1316.m	This is invoked for case 13. OLS (given S1): replace Educ with binary indicators $1\{Educ \geq j\}$ for $j=2, \dots, 18$.
populate_case1415.m	This is invoked for case 14. Proxy log of IQ (given S1): replace Educ with binary indicators $1\{Educ \geq j\}$ for $j=9, \dots, 18$; excludes missing IQ observations
populate_case1415.m	This is invoked for case 15. Proxy log of KWW (given S1): replace Educ with binary indicators $1\{Educ \geq j\}$ for $j=2, \dots, 18$; excludes missing KWW observations

populate_case1316.m	This is invoked for case 16. OLS (given GS): replace Educ with binary indicators $1\{\text{Educ} \geq j\}$ for $j=2, \dots, 18$; imputes parental education
populate_case1718.m	This is invoked for case 17. Proxy log of IQ (given GS): replace Educ with binary indicators $1\{\text{Educ} \geq j\}$ for $j=9, \dots, 18$; excludes missing IQ observations. Imputes parental education.
populate_case1718.m	This is invoked for case 18. Proxy log of KWW (given GS): replace Educ with binary indicators $1\{\text{Educ} \geq j\}$ for $j=2, \dots, 18$; excludes missing KWW observations; imputes parental education. This generates the results in Table 4, columns 1 , 3, and 4
populate_case2425.m	This is invoked for case 24. Perfect Proxy. OLS (Given S1): replace Educ with binary indicators; condition on $\log(\text{KWW})$; excludes missing KWW observations
populate_case2425.m	This is invoked for case 25. Perfect Proxy. OLS (Given GS): replace Educ with binary indicators; condition on $\log(\text{KWW})$; excludes missing KWW observations This generates the results in Table 4, column 2
populate_case25.m	This is invoked for case 25. Perfect Proxy. OLS (Given GS): replace Educ with binary indicators; condition on $\log(\text{KWW})$; excludes missing KWW observations This is used to prepare the last graph in draw_graphs.m